

Tradition and Reality in the *Taktika* of Nikephoros Ouranos

ERIC McGEER

The *Taktika* of Nikephoros Ouranos stands as the last of the *taktika/strategika* inspired by the revival of military science in tenth-century Byzantium and the last in the long tradition of Greek military writings dating from Antiquity.¹ It is a vast compilation of classical and Byzantine tacticians in 178 chapters that has never been edited in full, although various excerpts have been published.² During the 1930s the French scholar Alphonse Dain laid the foundations for a complete edition when he identified the text and compiler—unrecognized up to that time—and provided a detailed analysis of the contents, sources, and manuscripts;³ but he never realized his announced ambition to publish the *Taktika* in its entirety. In the fifty years since Dain's monograph appeared, the *Taktika* has attracted little further interest, and it remains among the least known of the texts in the corpus of *militaria*.

It is not simply the lack of an edition, however, that has consigned the text to obscurity for so long. As a philologist, Dain deemed the *Taktika* a compilation of considerable value for the reconstruction of the tradition of classical and Byzantine military literature, but his pronouncement that the *Taktika* had no original military historical worth has surely played a part in limiting scholarly interest. He regarded the work as a sterile Byzantine paraphrase and Ouranos as a faultlessly Byzantine compiler who, despite his outstanding military ca-

reer, never dreamed of sullyng his work with observations drawn from his own experience.⁴ In Dain's view, the text and its compiler exemplified the barrenness of the Byzantine military treatises, and his opinion has prevailed ever since.

Although not wholly unjustified, Dain's judgment is too sweeping. It has led scholars to overlook within the *Taktika* a potentially valuable source on Byzantine warfare in northern Syria at the beginning of the eleventh century written by Ouranos during his tenure as governor of Antioch. It is the purpose of this paper to demonstrate that the *Taktika* does contain, in chapters 56–65, a section treating contemporary field and siege tactics which bears the distinct imprint of Ouranos' own military experience. The arguments in support of this contention will begin with a systematic review of Ouranos' career, to be followed by an analysis of chapters 56–65 of the *Taktika*, with particular emphasis on two technical terms used by the author in his discussion of siege operations. In conclusion, Ouranos' observations on the utility of the classical handbooks on siege warfare will be discussed for the light they shed on the balance between theory and practice in the Byzantine handbooks of the later tenth century.

Nikephoros Ouranos played a prominent role in the reign of Basil II, first as a confidant of the young emperor and an ally against Basil Lekapenos, later as a successful military commander in the west, and finally as a trustworthy governor of Antioch whose capable surveillance of the east left Basil a free hand against Bulgaria. He also enjoyed a reputation as a man of letters and, apart from

¹For a survey of this literature, see A. Dain, "Les stratégistes byzantins," *TM* 2 (1967), 317–93, and H. Hunger, "Kriegswissenschaft," in *Die hochsprachliche profane Literatur der Byzantiner* (Vienna, 1978), II, 321–40.

²Works in which sections of the *Taktika* have been published are listed by Dain, "Les stratégistes," 371; to this list should be added Dain's edition of *Taktika* 54 and 119–23 in *Naumachica* (Paris, 1943), 69–104, and de Foucault's edition of chapters 63–74 (cited below, note 25).

³*La Tactique de Nicéphore Ouranos* (Paris, 1937).

⁴Cf. Dain, "Les stratégistes," 318, and *La Tactique*, 144; these judgments are routinely repeated in other surveys of the military treatises.

the *Taktika*, composed works of poetry, hagiography, and epistolography.⁵ His career has been outlined in several secondary works, but as no single study has yet collated all the material on this subject, it would be useful to review the evidence that has appeared to date, to which two unpublished seals of Ouranos will be added.

Ouranos is first mentioned in the sources as a participant in the negotiations conducted during the early 980s between Basil II and the Buyid emir of Baghdad, Adud al-Dawla, over the extradition of the rebel Bardas Skleros. Skylitzes states that Ouranos led an embassy to Baghdad where both he and Skleros fell under the emir's suspicion and were imprisoned.⁶ It has been shown, however, that the Greek sources have condensed negotiations of three to four years' duration into a single episode situated in the year 980,⁷ and testimony from Arab sources indicates that Ouranos traveled to Baghdad at a later date. In response to a first Byzantine embassy dispatched (in 980) to seek the return of Skleros, a Buyid ambassador, Ibn Shahram, journeyed to Constantinople in 982. He wrote a report on his mission in which he referred to Ouranos as the *kanikleios* (ὁ ἐπὶ τοῦ κανικλείου, or the keeper of the imperial inkstand),⁸ and portrayed him as an intimate of Basil II and, for that very reason, an enemy of the *parakoimomenos* Basil Lekapenos.⁹ Ouranos acted as an intermediary between Ibn Shahram and the emperor, only to be

chosen, much against his will, to head an embassy to Baghdad to conclude an agreement securing the return of Skleros. The sources record that because he attempted either to poison Skleros or negotiate secretly with him, Ouranos aroused suspicion and was incarcerated, but behind his misfortunes looms the hand of the *parakoimomenos*.¹⁰ He escaped or was released shortly after Skleros was let go (late in 986), and returned to Constantinople about 987—after the fall of his nemesis Basil Lekapenos.

Following his return to the capital, he continued both to enjoy and to justify the emperor's favor. The *Diatyposis* of Athanasios, dating between 987 and 999, records that Ouranos was the first to be made lay guardian (ἐπίτροπος) of the Great Lavra on Mount Athos, and a chrysobull of Constantine IX Monomachos, issued in 1052, recalls his capable fulfillment of this office.¹¹ But his most celebrated exploit was the destruction of the Bulgar army under the tzar Samuel in 996/7, a victory that virtually eliminated the Bulgar threat to Greece.¹² When the invading Bulgars defeated and killed the *doux* of Thessaloniki and then poured into central Greece, Basil appointed Ouranos Domestic of the Schools of the West (πάσης δύσεως ἄρχων)¹³ and sent him in pursuit. Although there is no evidence that Ouranos possessed any previous military experience—in any case, demonstrated loyalty weighed more than actual military ability in Basil's selection of commanders—he displayed great skill and energy in overtaking the Bulgars at

⁵ Ouranos' known literary works include a parainetic poem, ed. A. Papadopoulos-Kerameus, Βυζαντινὰ Ἀνάλεκτα, *BZ* (1899), 66–70, with later comments by E. Kurtz, "Das parainetische Alphabet des Nikephoros Ouranos," *BZ* 25 (1925), 18; a poem on the death of Symeon the Metaphrast, ed. S. G. Mercati, "Versi di Niceforo Uranos in morte de Simeone Metafraste," *AnalBoll* 68 (1950), 126–34; two hagiographical works, one ed. F. Halkin, "Un opuscule inconnu de Nicéphore Ouranos: La Vie de St. Théodore le conscrit," *ibid.*, 80 (1962), 308–24, the other, a vita of St. Symeon Stylites the Younger, in *PG* 86 (2), cols. 2987–3216 (a reprise of an earlier vita by Arkadios, bishop of Cyprus); and a corpus of 50 letters, ed. J. Darrouzès, *Épistoliers byzantins du X^e siècle* (Paris, 1960), 217–48.

⁶ Ioannis Scylitzae *Synopsis historiarum*, ed. J. Thurn, CFHB 5 (Berlin, 1973), p. 327.30–44.

⁷ J. H. Forsyth, in his masterful dissertation *The Byzantine-Arab Chronicle (938–1034) of Yahya b. Said al-Antaki* (University of Michigan, 1977), 400–16, gives the most thorough account of these negotiations and the problematic chronology; see also M. Canard, "Deux documents arabes sur Bardas Skleros," *Actes du V^e Congrès d'Études byzantines* (SBN 5) (Rome, 1930), 55–69.

⁸ V. Laurent published a seal of a Nikephoros ἀνθύπατος πατρικίος καὶ ἐπὶ τοῦ κανικλείου, whom he identified as Nikephoros Ouranos, in *Corpus des sceaux*, II: *L'administration centrale* (Paris, 1981), no. 219. This identification, tempting as it is, cannot be verified for lack of a family name on the seal.

⁹ Ibn Shahram's report has been translated into English by H. F. Amedroz and D. Margoliouth, *The Eclipse of the Abbasid Caliphate*, VI (London, 1921), 23–35.

¹⁰ It was Basil Lekapenos who had arranged for Ouranos to be sent to Baghdad as a means of ousting a powerful rival vying for influence over Emperor Basil II; see W. G. Brokkaar, "Basil Lekapenos: Byzantium in the Tenth Century," *Studia byzantina et neohellenica neerlandica* 8 (1972), 199–234, esp. 224–34.

¹¹ See P. Lemerle et al., *Actes de Lavra*, I (Paris, 1970), 19–21 and 189–92.

¹² Skylitzes, pp. 341.23–342.51; Zonaras, pp. 558.12–559.10.

¹³ A document from the Athonite monastery tou Vatopediou, dated 1001, recalls Ouranos' mediation in a quarrel between this monastery and tou Philadelphou; since the text reads ὁ πανεύφημος μάγιστρος ὁ κύριος Νικηφόρος, τὸ τινικαῦτα ὡν δομέστικος τῶν σχολῶν, it must refer to the period between 996/7 and 999 when Ouranos was Domestic of the Schools. See M. Goudas, Βυζαντινὰ ἐγγράφα τῆς ἐν Ἀθῶν ἱερᾷ μονῇ τοῦ Βατοπεδίου, *Ἐπ. Ἐτ. Βυζ. Σπ.* 3 (1926), 113–15. I. Jordanov has recently published two seals of a Nikephoros *magistros* and Domestic of the Schools, whom he identified as Nikephoros Ouranos, but, as in the case of the seal published by Laurent (note 8 above), the absence of a family name on these seals rules out a positive identification; see Jordanov, "Molybdobulles de Domestiques des Scholes du dernier quart du X^e siècle trouvées dans la Stratégie de Preslav," *Studies in Byzantine Sigillography* 2 (1990), 210–11 (where the *cursus honorum* should be revised in light of the foregoing review). A similar specimen was published by G. Zacos, *Byzantine Lead Seals*, II (Berne, 1984), no. 863.

the Spercheios River, searching out a crossing, and making an unexpected assault on their camp. Samuel and his son were wounded and escaped death only by hiding beneath the slain; so great was the slaughter that nearly twenty years later Basil could still be awed by the sight of the bones of the Bulgar dead strewn over the field.¹⁴

The high point of Ouranos' career was his installation as governor of Antioch by Basil II in December 999 at the conclusion of the emperor's three-month campaign against the Fatimids in Syria and Palestine. In conducting this campaign it had been the emperor's intention to restore the Byzantine position in northern Syria in the wake of the defeat and death of the previous governor of Antioch, Damianos Dalassenos, at the battle of Apamea in July 998, and to compel the Fatimids to sign a peace treaty which would thus leave him free to concentrate on his wars in Bulgaria. With the conclusion of a ten-year truce with Caliph al-Hakim during the year 1001, Basil achieved his goal to reduce Byzantine military activities in the east in order to embark on a full-scale offensive against Bulgaria.¹⁵

The appointment of Nikephoros Ouranos dovetailed with Basil's aims to stabilize the eastern frontier. His career up to that point had shown him to be a court official and soldier of proven loyalty and competence, well qualified on both counts to supervise the now secondary front. Although the literary sources call him simply the *magistros* or the *archōn* of Antioch, an unpublished seal of his (Fogg Art Museum, no. 1576, edited and illustrated below in the Appendix) proclaims him "master of the East" (ὁ κρατῶν τῆς Ἀνατολῆς), demonstrating that Ouranos was in effect Basil's plenipotentiary in the east. Several episodes from his career at Antioch are known,¹⁶ although the exact chronology is uncertain. He undertook one major expedition

into Armenia in 1001–2 to forestall the Georgian king Gurgen's advance into the region of Tao and concluded a settlement with him,¹⁷ but for the most part his military duties took on the character of local police actions. In 1000–1001 he suppressed a revolt by two Bedouin tribes identified as the Noumeritai and Ataphitai in the Greek sources,¹⁸ and during the years 1005–7 he fought a series of engagements against the rebel al-Asfar and his Bedouin allies.¹⁹ After 1007 nothing more is heard of Ouranos directly—the next known governor of Antioch was appointed in 1011—but the renown of his triumph over the Bulgars and his governorship of Antioch persisted well after his lifetime. Skylitzes recounts that when Emperor Michael VI Stratiotikos (1056–57) appointed his nephew Michael governor of Antioch in 1056, "at the time of the nomination he gave him the name Ouranos as though he traced his lineage back to the Ouranos of old, and bestowed upon him the title *magistros* of Antioch, just as the other had been."²⁰

For reasons that will become clear below, the composition of the *Taktika* should be dated to the years during Ouranos' stay at Antioch. To identify and discuss the section of the *Taktika* reflecting his military experiences in the east, we must begin with Dain's analysis of the contents and sources of the text.²¹ He identified four main components in the text, of which the first two were based on Byzantine tactical works: chapters 1–55 were a para-

¹⁴Skylitzes, p. 364.76–78. On the fame Ouranos won as a result of this victory, see the letter written to him by Leo of Synada, ed. M. P. Vinson, *The Correspondence of Leo, Metropolitan of Synada and Syncellus*, CFHB 23 (Washington, D.C. 1985), 22–23, with commentary on 102–3.

¹⁵Forsyth, *The Byzantine-Arab Chronicle*, 501–15, surveys Basil's military and diplomatic activities in northern Syria between 998 and 1000 and the considerations behind Ouranos' appointment as governor of Antioch. The Byzantine-Fatimid contest for domination in northern Syria has lately been studied by W. Farag, "The Aleppo Question: A Byzantine-Fatimid Conflict of Interests in Northern Syria in the Later Tenth Century A.D.," *BMGS* 14 (1990), 44–60.

¹⁶The standard work on the governors of Antioch between 969 and 1084 is by V. Laurent, "La chronologie des gouverneurs d'Antioche sous la seconde domination byzantine," *MUSJ* 38/10 (1962), 219–54, esp. 235–36 on Ouranos.

¹⁷Forsyth, *The Byzantine-Arab Chronicle*, 557–59. Ouranos had participated in Basil's expedition in 1000 to annex the lands of the deceased Georgian sovereign David (who had pledged them to the Byzantine emperor), as his letter to Leo, *anthypatos patrikios* and *epi tēs sakellēs*, records; see Darrouzès, *Épistoliers byzantins*, 226 (no. 19).

¹⁸Skylitzes 345.34–43; W. Felix discusses this revolt in *Byzanz und die Islamische Welt im früheren 11. Jahrhundert* (Vienna, 1981), 51–53.

¹⁹Felix, *Byzanz*, 53–54. A series of letters addressed to Ouranos by Philetos Synadenos congratulating him on his victorious campaigns probably refers to these events; see Darrouzès, *Épistoliers byzantins*, 254–59 (nos. 8–13).

²⁰Skylitzes, p. 483.5–7; cf. Zonaras, III, p. 654.10–11. Michael Psellos' phrase ἡ οὐρανόπολις Ἀντιόχεια may be another indication that Ouranos' name was linked with the city of Antioch well after his death; see the *Historia Syntomos*, ed. and trans. W. J. Aerts, CFHB 30 (Berlin, 1990), p. 98.94 (with Aerts' comments on p. 165). On Michael "Ouranos," see Laurent, "La chronologie," 243. Authentic members of the Ouranos family recorded in the 10th–11th centuries are a 10th-century *patrikios* Michael Ouranos, mentioned in the *De cerimoniis* (p. 668.14), and an 11th-century *kritēs* Symeon Ouranos, of whom an unpublished metrical seal is preserved in the Dumbarton Oaks collection (DO 55.1.3897).

²¹Dain, *La Tactique*, 39–91.

phrase of the *Taktika* of Leo VI, followed in chapters 56–74 by a paraphrase of the *Praecepta militaria* of Nikephoros II Phokas;²² the third and fourth groups (75–175, 176–78) were derived from collections of classical military writings. The second component of Ouranos' *Taktika*, chapters 56–74, is of primary interest here.

It is necessary first of all to correct Dain's mistaken supposition that the *Praecepta militaria* formed the basis for all of chapters 56–74 of the *Taktika*. He rightly identified the six chapters comprising the *Praecepta* as the source for Ouranos' chapters 56–62;²³ he then went on, however, to speculate that the succeeding chapters 63–74, for which he claimed to have found no direct source, must represent a paraphrase of a lost continuation of the *Praecepta*.²⁴ It was in this belief that his long-time colleague J.-A. de Foucault published chapters 63–74 of the *Taktika* to complete the six chapters of the *Praecepta* preserved in a sole codex now in Moscow (State Historical Museum no. 436/298) and thus make available the "full" treatise of Nikephoros Phokas.²⁵

Although Dain's hypothesis won initial acceptance, the arguments that he advanced in its favor are weak and do not withstand close scrutiny.²⁶ It can be shown, for instance, that chapters 66–74 are in fact largely derived from the classical tactician Onasander,²⁷ thus making it unnecessary to postulate a lost continuation of the *Praecepta* as the source for these chapters. The telling proof against Dain's reconstruction, however, lies in Mihăescu's demonstration that part of chapter 64 of the *Taktika* is closely based on chapter 20 of the *De*

re militari,²⁸ a treatise written at least twenty-five years after the *Praecepta*.²⁹ Consequently Dain's hypothesis that a missing section of the *Praecepta* was the basis for chapters 63–74 of the *Taktika* must be rejected—the six chapters preserved in the Moscow codex do represent Phokas' treatise in its entirety—and so chapters 56–74 in the *Taktika* need to be reexamined.

Of these nineteen chapters, the last nine (66–74) are not linked by common source or subject with the preceding ten and should be grouped instead with chapters 75–175 based on classical tacticians. This leaves chapters 56–65 and the question of their sources, context, and purpose.³⁰

The source of chapters 56–62 has already been accounted for. Nikephoros Phokas wrote the *Praecepta militaria* as a manual for his army's offensive campaigns against Cilicia and northern Syria in the 960s. Ouranos' version of the text written forty years later shows differences in style, organization, and minor details, but for the most part closely adheres to its model's prescriptions on battle formations and tactics. Ouranos, however, did record a noteworthy adjustment in infantry tactics that must have been introduced after Phokas' time;³¹ this change bears witness to Ouranos' intention to keep his text abreast of recent developments where necessary. In turn, his adherence to his predecessor's other tactical precepts must mean that they were still deemed effective and did not require modification for the time being.

The succeeding chapters 63–65 take up a variety of topics. Chapter 63 outlines the methods for conducting raids into enemy territory, the type of warfare reminiscent of the guerilla tactics out-

²² Ed. Ju. A. Kulakovskiy, "Strategika imperatora Nikifora," in *Zapiski imperatorskoi akademii nauk* 8, 9 (St. Petersburg, 1908), 1–21.

²³ Ibid., 47–49.

²⁴ Ibid., 49–51.

²⁵ J.-A. de Foucault, "Douze chapitres inédits de la *Tactique* de Nicéphore Ouranos," *TM* 5 (1973), 281–311; all references to the Greek text of chapters 63–65 of the *Taktika* are from this edition.

²⁶ He assumed, for example, that the *Praecepta* ended *ex abrupto* because of an accident to the manuscript, which in fact he had never seen; the manuscript is not damaged nor is there any reason to suspect that the concluding passage of the *Praecepta* is mutilated in any way. Dain's studies of the classical and Byzantine tacticians continue to be invaluable contributions to this field, but scholars should be attentive to the many unfounded assumptions and errors in his work. To be fair, however, it should be noted that his survey of the military corpus was left unrevised at his death.

²⁷ With the exception of *Taktika* 67, which is drawn from chapter 45.32 of the *Sylloge tacticorum* (ca. 950, ed. A. Dain [Paris, 1938]), chapters 66–74 derive (directly or indirectly) from Onasander's treatise on generalship (1st century A.D.).

²⁸ H. Mihăescu, "Pour une nouvelle édition du traité *Praecepta militaria* du X^e siècle," *RSBS* 2 (1982), 318–21.

²⁹ Ed. G. T. Dennis, *Three Byzantine Military Treatises*, CFHB 25 (Washington, D.C., 1985), 241–335. The date of the treatise cannot be ascertained exactly, but references in the treatise (1.100, 161) to the *tagma* of the *Athanatoi* suggest a terminus post quem of 970 when this corps was founded by John Tzimiskis: cf. N. Oikonomidès, *Les listes de préséance byzantines* (Paris, 1972), 332–33. It was most likely composed during the 990s when Basil II resumed the war against Bulgaria after withstanding the rebellions of Bardas Skleros and Bardas Phokas (986–989). Ouranos' use of chapter 20 of the treatise in the *Taktika* 64.4–8 (see previous note) marks a terminus ante quem of 999–1007, the period to which Ouranos' composition of the *Taktika* should be assigned.

³⁰ I have edited these chapters for publication with a new edition of the *Praecepta militaria*; for the time being it is necessary to consult chapters 56–62 in Monacensis gr. 452 (14th century) and 63–65 in de Foucault's edition (cited above, note 25). Note that the titles of chapters 59 through 64 have not been preserved.

³¹ Discussed in my article "Cavalry versus Infantry: The Byzantine Response," *REB* 46 (1988), 144–45.

lined by Phokas in the *De velitatione*.³² Now, however, the situation is completely the opposite, for instead of defending their own territory against enemy raiders, the Byzantines are making forays to plunder and devastate Muslim regions, presumably as preventive or punitive strikes against the unruly neighboring populations who continued to harass the Byzantines after peace had been made with the Fatimids. Ouranos' protracted campaigns against al-Asfar's Bedouin followers between 1005 and 1007 probably involved this type of hit-and-run warfare.

Chapter 64 discusses two situations: first, how the army should break camp and move out either to engage a waiting enemy or to start on the day's march with the enemy in the vicinity, and second, how it should fight its way through a defile occupied by the enemy. The first situation is not discussed in other manuals, and so the first part of the chapter (64.1–4) represents Ouranos' own account of current tactical prescriptions for armies faced with this problem; the second part (64.5–8), as noted above, is taken directly from chapter 20 of the *De re militari*.³³

Chapter 65, entitled *Περὶ καστροπολέμου*, is concerned with siege tactics in Syria, and reviews the necessary steps in a siege campaign from the outset to the end. The commander must begin by devastating the region surrounding the intended objective, and ensuring that the routes into Syria are tightly surveyed and blockaded to cut the defenders off from all supplies of food and other necessities. Once arrived before the enemy fortress, the army must prepare a siege camp; offers of mercy to the defenders should then be extended, which, if refused, should be followed by threats of reprisals against those deciding to hold out. Ouranos goes on to outline the methods he deems best for launching an assault on the walls, and advises the commander, if the defenders' position is hopeless, either to take the fortress by force or to grant the defenders their lives in exchange for their capitulation, after which their persons and goods would be divided among the Byzantine besiegers—harsh terms meant to have an intimidating effect in any subsequent campaigns against other Syrian strongholds.

Ouranos is known to have undertaken at least

one major siege while governor of Antioch,³⁴ and of all the chapters surveyed above, chapter 65 most clearly reveals the distillation of his own experience and observations in his writings on contemporary warfare. This chapter is particularly fascinating not only for the siege tactics he prescribes but also for the glimpses he offers into the conduct of both sides throughout the campaign. He predicts that the blockaded Muslims will broadcast their plight to the faithful in the mosques of their towns (καὶ μηνύουσιν εἰς τὰ μασγίδα πρὸς τοὺς ματαβάδας) and appeal to their co-religionists in Syria for aid;³⁵ he then issues a warning that the local Christian population may be among the suppliers: "our people of low station and high, in their love of profit, provide them not only with great quantities of grain and flocks but also with all number and manner of foodstuffs in their possession."³⁶ The current political and demographic situation is mirrored in his advice to threaten all Magaritai, Armenians, and Syrians inside the besieged fortress with death unless they cross over to the Byzantines, a passage bearing witness to the varying allegiances of the peoples displaced or relocated in the wake of the Byzantine conquests in Cilicia and northern Syria.³⁷ It is also apparent that the Byzantines continued their policy of devastating and depopulating Muslim regions as a means of eliminating the enemy's capacity and will to resist their authority.

Taken together, the tactics and procedures outlined in chapters 63–65 portray the type of local warfare and conditions prevailing in the east at the outset of the eleventh century, at a time when the Byzantines had committed their military strength to the subjugation of Bulgaria. I would argue that Ouranos appended these three chapters to his slightly modified version of the *Praecepta* to form a treatise akin to a *Praecepta militaria continuata*, so to speak, in which he sought to bring Phokas' treatise on battle tactics up to date and to add sections treating the local guerilla, campaign, and siege operations that the Byzantine armies conducted not

³⁴ During the revolt of al-Asfar; see Felix, *Byzanz*, 53.

³⁵ *Taktika* 65.4–7; note Ouranos' use of ματαβάδας to refer to the Muslim faithful, obviously an Arabic term that he learned at Antioch. See de Foucault's comments in "Douze chapitres" (above, note 25), 296, note 28.

³⁶ *Taktika* 65.7.

³⁷ *Taktika* 65.13; on the movement of populations in the east in the later 10th century, see G. Dagron, "Minorités ethniques et religieuses dans l'orient byzantin à la fin du X^e et au XI^e siècle: L'immigration syrienne," *TM* 6 (1976), 177–216, esp. 177–86, where this passage from the *Taktika* is cited and discussed.

³² On these tactics, see the edition and study of the treatise by G. Dagron, *Le traité sur la guérilla (De velitatione) de l'empereur Nicéphore Phocas (963–969)* (Paris, 1986).

³³ *De re militari* 20.86–141 (ed. Dennis).

to conquer new territories in the east but to control those won over the preceding fifty years. In writing chapters 56–65 of the *Taktika*, Ouranos merged tactical precepts drawn from contemporary treatises with others from his own experience into a handbook detailing the current procedures and operations of the Byzantine army in the east. These ten chapters form a complete treatise within themselves, and as such deserve to be included among the other military handbooks written by active soldiers during the later tenth century, the *De velitatione*, the *Praecepta militaria*, and the *De re militari*.

Ouranos' pragmatic, firsthand approach makes chapter 65 of the *Taktika* an invaluable source for the study of siege tactics, a topic that has received little attention to date despite the considerable role siege operations played in the Byzantine campaigns of conquest during the late tenth and early eleventh centuries. In the east the Byzantines methodically isolated and seized key centers during their advance into Mesopotamia, Cilicia, and northern Syria, a process culminating in the capture of Antioch in 969; in the west Basil II effectively throttled the Bulgars' resistance by targeting crucial strongholds (Vidin, Voden, Skopje) in his yearly expeditions. A comprehensive survey of Byzantine siege tactics and weapons is not possible at the present time, however, since most of the Byzantine poliorcetic treatises still lack modern editions, translations, and commentaries. As a result, it seems more advisable here to concentrate on two technical terms used by Ouranos which will show Byzantine siege operations at their most practical.

In the *Taktika* 65.11, Ouranos issues instructions on the defenses necessary for the siege camp. The army camped in a square, keeping the infantry along the perimeter to defend the cavalry and baggage train within, and the encampment was to be protected by a trench, as well as other obstacles placed outside the trench:

Ὁφείλει δὲ γίνεσθαι καὶ ἔξωθεν τῶν πεζῶν σοῦδα, καὶ ἔξωθεν τῆς σοῦδας πάλιν ἵνα ῥίπτωνται τριβόλια καὶ τρισκέλια μετὰ τζιπάτων, ἃν ἄρα καὶ βασιτάζη αὐτὰ ὁ λαός.

There must be a trench to the outside of the infantrymen, and then on the outside of the trench, caltrops and *triskelia* with *tzipata* must be thrown out, if the host happens to be carrying any.

The entire phrase τρισκέλια μετὰ τζιπάτων is a hapax, occurring only in the *Taktika*, but the word

τζιπάτα is also found in an anonymous treatise on siege warfare known as the *De obsidione toleranda*, which dates from the first half of the tenth century.³⁸ In this treatise the defenders of a town about to be besieged are advised to dig a series of trenches before the walls, and then “in addition to these measures they should prepare *tzipata* outside the trenches and keep their whereabouts clear to our men, but unknown to the enemy.”³⁹ The editors of both treatises were perplexed by this word—no less so after consulting Du Cange who lists τζίπα from the *De obsidione* and refers the reader to the homophonic τζήπα—and declared that they were at a loss to explain the term since none of the meanings proposed (*membrana*, *vena*, *musculus*, *pelliculus*, all conforming with the modern Greek τσίπα, “membrane,” “skin,” “crust”) satisfied the context. But at a second glance it appears that they overlooked a reference that would have resolved the quandary, for besides these primary meanings Du Cange cites a gloss (from unspecified botanical manuscripts) suited perfectly to the context: κακτιδόνας, τὰς τζίπας, that is, equating τζίπα with “cactus barb.”

It is obvious, then, that in the *De obsidione*, *tzipata* must refer to sharp spikes planted in the ground to pierce the feet of enemy soldiers or horses unwary—and unfortunate—enough to tread upon them. The phrase τρισκέλια μετὰ τζιπάτων in the *Taktika*, however, implies that these spikes were affixed to some sort of stand, and to determine exactly what is meant, it is helpful to refer to the *Taktika* of Leo VI.⁴⁰ In book 11.26 Leo describes a weapon invented by his general Nikephoros Phokas (the grandfather of Emperor Nikephoros II Phokas) during one of his campaigns in Bulgaria:

ἦν δὲ τοιοῦτον. κανόνια δύο σύμμετρα λαβὼν ξύλινα ἅνὰ τριῶν που σπιθαμῶν ἢ ὀλίγῳ πλέον λαβδαραίαν συνέμειξεν, ἕτερον δὲ κανόνιον ὁμοίως, ἔχον σπιθαμὰς πέντε ἢ καὶ ἕξ, τάξιν μεναύλου ἐν τῇ συμμίξει τοῦ δισκέλιου ἐπιθεῖς τρισκέλιον ἐποίησεν, ἰστάμενον ἰσχυρῶς διὰ τῆς ὑπ' ἀλλήλων τῶν σκελῶν συγκροτήσεως. περὶ δὲ τὸ ἄκρον τοῦ οἴον μεναύλου ξιφάριον μέγα καὶ ἄδρὸν ἐνέβαλεν προκύπτον τοῦ τρισκέλιου, ὥς εἴρηται, σπιθαμὰς δύο ἢ μικρῶ πλέον. . . .

It went like this. Taking two wooden sticks of equal length, roughly three *spithamai* [70 cm] or a little more, he assembled a *lambda*-shaped frame (Λ), and

³⁸ *Anonymus de obsidione toleranda*, ed. H. van den Berg (Leiden, 1947) (hereafter *De obsid.*).

³⁹ *De obsid.*, p. 53.6–7.

⁴⁰ Ed. R. Vári, *Leonis imperatoris Tactica*, two vols. (Budapest, 1917–22) (to 14.38). The only complete text is found in PG 107, cols. 671–1094.

by placing another stick, with a length of five or six *spithamai* [1.2–1.4 m], like a spear at the junction of the two-legged frame he constructed a tripod, which stood firm because of the legs being locked together. To the end of the spear, as it were, he fastened a large, solid point protruding two *spithamai*, or slightly more [47 cm +], from the tripod, as described. . . .

Leo goes on to say that Nikephoros used to place these easily improvised and transportable weapons around his encampments to provide a barricade against enemy cavalry attacks, especially if there had not been sufficient time to dig a trench. The *τρισκελία* μετὰ τζιπάτων that Ouranos recommends be placed outside the camp trench will thus have been like the tripods (*τρισκελία*) described by Leo, with the longer stick, capped by a long blade or point (called a *ξιφάριον* by Leo, *τζίπα* by Ouranos), attached to an inverted V-shaped frame at an angle calculated to impale an oncoming attacker or his horse. These weapons, as well as caltrops and other traps, would have been difficult for an enemy to see at night; during the day they would have been effective in slowing down attackers who would have had to pick their way through these visible but dispersed obstacles. The treatises show that such sinister contraptions were routinely set out around temporary encampments or siege camps to reinforce, or on occasion to replace, the usual defenses consisting of a trench and shield palisade, and that they were part of the standard Byzantine repertoire during the tenth and eleventh centuries.

The second term, *λαῖσα*, appears in Ouranos' discussion of the steps to be taken in preparing for an assault on the enemy fortress (65.14–17):

Ὅφειλεις δὲ διατάξασθαι ὅλῳ τῷ στρατῷ τοῦ ποιῆσαι τὰ πρὸς καστροπόλεμον μηχανήματα, λαῖσας εἴτε ἀπὸ κλημάτων ἀμπελίων, εἴτε ἀπὸ βεργίων ἰτέας, ἢ ἀπὸ μυριχίων. ὀφείλουσι γὰρ γενέσθαι πλεκτὰ καὶ πολλὰ. τὸ δὲ σχῆμα αὐτῶν ἵνα εἰσὶν τροπικῶς οἴκου. ἔστω δὲ τὸ ἐπάνω μέρος οἷον τὸ στέγος αὐτῆς καὶ ὀξύτερον. ἐχέτωσαν δὲ ἀπὸ δύο θυρίδων, καὶ ἵνα χωρὶς μία ἐκαστὴ λαῖσα ἀπὸ ἀνδρῶν δεκαπέντε ἢ καὶ εἴκοσιν. ἵνα δὲ ἐκτὴ καὶ εἰς τὸ ἔμπροσθεν στόμα ἀποκρεμάμενον ἐκ τῶν αὐτῶν βεργίων ὡς βῆλον πρὸς τὸ δέχεσθαι τὰ ῥιπτόμενα ἐκ τοῦ τείχους καὶ φυλάττειν καὶ τοὺς ἐσωθεν. . . . μὴ γίνωνται δὲ αἱ λαῖσαι βαρεῖαι πρὸς τὸ μὴ δύνασθαι βαστάζεσθαι, ἀλλὰ ἐλαφρότεροι ὅσον δ' ἔστιν ἐνδεχόμενον βαστάζεσθαι αὐτὰς καὶ φέρεσθαι πρὸς τὰ τεῖχη καὶ πάλιν εὐκόλως πρὸς τὰ ἔξω. . . . ἵνα δὲ πῆξωσι καὶ τὰς λαῖσας ὡς ἀπὸ ὀργυιῶν πέντε ἢ καὶ δέκα ἐγγὺς τοῦ τείχους, καὶ οἱ μὲν διὰ τοξείας, οἱ δὲ διὰ σφενδοβολῶν ἵνα κρούωσι τοὺς ἐχθροὺς, ἄλλοι δὲ διὰ τῶν μαγγανικῶν καὶ τὰ τεῖχη καὶ τοὺς ἐχθροὺς ἵνα κρούωσι μετὰ λιθαρίων, ἄλλοι μετὰ τζόκων καὶ σειστών ἵνα ὀρῶσσωσι τὰ τεῖχη.

You must issue instructions to the entire army to prepare the implements used in siege warfare, *laisai* made either from vine stalks or from branches of willow or mulberry trees. These must be woven together and in great number. They [the *laisai*] should be like a house in shape; the upper section, that is, the roof, must be quite sharply peaked. They should have two doorways, and each *laisa* must have room enough for fifteen to twenty men. Hanging over the opening in front it should have a piece made from the same branches acting as a screen to receive projectiles shot from the wall and protect the men inside. . . . The *laisai* must not be heavy, impossible to lift, but should be rather light, so much so that it is possible to lift and carry them up to the walls, then easily withdraw them once again. . . . Have the men fix the *laisai* near the wall at a distance of five to ten *orguias* [roughly 10–20 m], and they should bombard the enemy, some with arrows, some with slings; others using the catapults must bombard both the walls and the enemy with stones, while men with sledgehammers and battering rams must break apart the walls.

A clear picture of the design and use of the *laisai* emerges from Ouranos' account. They were steeply pointed, hut-like shelters which, since they were put together from vines and branches, could be hastily constructed in situ by the besiegers. Although somewhat makeshift, these shelters offered protection to men taking rest (and presumably the wounded), since the besiegers' force was to be divided into three units working in successive shifts to maintain an uninterrupted assault throughout the day. And as the soldiers involved in the siege kept up a constant barrage against the enemy defenders on the parapet, men in the role of sappers sought out a suitable place to tunnel beneath the foundations of the fortress wall and thereby collapse an entire section.⁴¹ Ouranos does not say so, but it seems likely that sappers could also have begun their tunnels in the shelter of the *laisai* closest to the walls.

Ouranos' description of the *laisai* and their use invites comparison with other known uses of the term, since *λαῖσα* (or the homophonic *λέσσα*) is also found in several texts and treatises on siege warfare from the tenth and eleventh centuries. The origin of the word may be explained first. It appears to have entered Byzantine Greek about the beginning of the tenth century, as implied by an anecdote recorded in chapter 51 of the *De admin-*

⁴¹ *Taktika* 65.19–21; the sappers burrowed beneath the foundations and placed wooden supports under the stones to keep the wall from falling upon them; when they had finished digging under the foundations, they set dry wood in the cavity and ignited it, thereby burning the support beams and collapsing the section of the wall.

istrando imperio. During the reign of Leo VI (886–912), the Byzantine navy attempted to transport a force of Turks (i.e., Hungarians in Byzantine service) across a river (unnamed, but surely the Danube) during a campaign against the Bulgarian tzar Symeon (893–927), only to find their way blocked:⁴²

Οὗτος οὖν ὁ Συμεών, ὁ ἄρχων Βουλγαρίας, μαθὼν τὴν τοῦ πλώϊμου πρὸς τὸν ποταμὸν ἄφιξιν, καὶ ὅτι μέλλει τὸ πλώϊμον τοὺς Τούρκους κατ’ αὐτοῦ περᾶσαι, ἐποίησεν λέσας, ἥτοι πλοκοὺς ἰσχυροὺς πάνυ καὶ στερεμενίους, ὥστε μὴ δύνασθαι τοὺς Τούρκους ἀντιπερᾶν, δι’ ἣν ἐπίνοιαν καὶ ἐκωλύθησαν οἱ Τούρκοι τὸ πρῶτον περᾶσαι. Ὁ οὖν προρρηθεὶς Μιχαὴλ ὁ Βαρκαλᾶς μετὰ καὶ ἄλλων δύο πλώϊμων ἀναλαβόμενοι τὰ σκουτάρια καὶ σπαθία αὐτῶν, ἀνδρείῳ καὶ ῥωμαλέῳ ὁρμήματι ἐκπηδήσαντες τοῦ χελανδίου, κατέκοψαν τὰς λέσας, ἥτοι τοὺς πλοκοὺς, καὶ ἦνοιξαν τὸν πόρον τοὺς Τούρκους.

Jenkins translated the text as follows:

Now this Symeon, prince of Bulgaria, on learning that the navy had arrived in the river, and that the navy was about to carry over the Turks against him, constructed mantlets or wicker fencing, very strong and tough, so that the Turks might not be able to cross over, and by this device the Turks were at first prevented from crossing. So the aforesaid Michael Barkalas and two other sailors took up their shields and swords, and leaping down from the warship with a brave and powerful rush, cut down the mantlets or wicker fencing and opened the passage for the Turks.

The passage implies that *lesa* is not of Greek but of Slavic derivation, and in fact this word is found in medieval Bulgarian and other Slavic languages in the meaning of “dam” or “fencing,” specifically that fashioned from interwoven twigs and branches, as befits the context here.⁴³ It is reasonable to assume that as a result of this and other encounters the Byzantines emulated the technique and applied the Slavic name to their own barricades or defenses spliced together from vines and branches. The technique itself, however, was al-

ready very old—for their sieges the Romans had built huts of vines and branches called *vinea* which continued to be used in the medieval west⁴⁴—but the widespread use of such shelters in Byzantine siege warfare is first attested in the tenth century.

That such plaited screens had come to be called *laisai* early in the tenth century is acknowledged in a tenth-century poliorcetic treatise attributed to Hero of Byzantium.⁴⁵ Although for the most part a compilation of classical manuals on siege weapons and tactics, the treatise is interspersed with current material. At one point the author refers to “the recently devised *laisai*, woven together and extremely light” (καὶ τῶν νῦν ἐκ πλοκῆς ἐφευρεθεισῶν ἐλαφροτάτων λαισῶν).⁴⁶ Elsewhere he recommends the *laisai* for their lightness and swift assembly (again, woven from vines or freshly cut branches), but points out that they should not be used if the approach to the enemy fortress is steeply inclined since they cannot withstand heavy objects (presumably logs and boulders rolled down against them); instead, they were most effective on level terrain and could be used to supply cover when the besiegers attempted to fill in the trenches blocking access to the fortifications.⁴⁷ These excerpts on the *laisai* are attached to the prescriptions, standard in classical poliorcetic treatises, detailing different types of “tortoises” (χελώναι) or wooden sheds (sometimes wheeled) constructed as protection for soldiers against enemy projectiles as they advanced up to the walls. From the context it would appear that the compiler saw the Byzantine *laisai*, hut-like shelters fashioned from vines or willow and mulberry branches, as a simpler version of the ancient “tortoises.” They would have been employed more commonly because they offered the advantages of simple, quick assembly from materials readily available, and of affording sufficient protection to the soldiers within while remaining light enough to be easily transported.

Other poliorcetic texts show that *laisai* might

⁴²Constantine Porphyrogenitus *de administrando imperio*, ed. Gy. Moravcsik, trans. R. J. H. Jenkins, CFHB 1 (Washington, D.C. 1967), pp. 250.112–252.120. It is not clear from the passage whether the Bulgars used the *laisai* as a dam to block traffic along the river or as a barricade along the shore to prevent the Byzantines from crossing the river. Leo VI appears to refer to the same episode in his *Taktika* (18.42) where he recalls an expedition against the Bulgars in which the Byzantine navy ferried a force of Hungarians (Τούρκοι) along the Danube (Ἰστρος), an event dated to the year 895.

⁴³M. A. Triandaphyllides, *Die Lehnwörter der mittellgriechischen Vulgärliteratur* (Strassburg, 1909), 150. See the definitions of the word in Slavic languages (with references) listed by M. Vasmer, *Russisches etymologisches Wörterbuch*, II (Heidelberg, 1953), 33–34, the *Bulgariski etimologičeski rečnik*, III (Sofia, 1986), s.v., and the *Slovar’ russkogo iazyka XI–XVII vv* (Moscow, 1981), VIII, 211.

⁴⁴Cf. Ph. Contamine, *La guerre au moyen âge* (Paris, 1980), 208–14. The 6th-century historian Agathias describes how Byzantine soldiers used transportable “wicker roofs” (a device he calls a σπαλῶν) to shelter them as they approached the walls during the siege of Archaeopolis in 552; see *Agathiae Myrinaei historiarum libri quinque*, ed. R. Keydell, CFHB 2 (Berlin, 1967), bk. 3.5.9–11, and J. D. Frendo’s translation of the passage in *Agathias. The Histories*, CFHB 2a (New York-Berlin, 1975), 73.

⁴⁵Ed. C. Wescher, *Poliorcétique des grecs. Traité théorique—récits historiques* (Paris, 1867), 197–279; on the poliorcetic text under the name Hero of Byzantium, see A. Dain, *La tradition du texte d’Héron de Byzance* (Paris, 1933).

⁴⁶Hero of Byzantium, ed. Wescher, p. 199.13–14.

⁴⁷*Ibid.*, pp. 207.17–23 and 209.6.7.

also be used by the garrison of a besieged fortress. The *De obsidione*, for instance, advises the defenders of a town awaiting attack “to gather vines and willow or mulberry branches for the construction of *laisai* necessary to protect the men attending to the siege machines,” that is to say, for the construction of woven screens to shield men on the parapet from projectiles as they operated stone- or arrow-shooting weapons against the enemy.⁴⁸ An anonymous compendium of instructions on how to resist sieges, compiled during the tenth century, likewise recommends *laisai* as protection against enemy projectiles,⁴⁹ and the eleventh-century Kekaumenos directs the commander expecting a siege to “weave *laisai*” (πλέξον λέσας), presumably for the same purpose.⁵⁰

According to contemporary treatises, *laisai*, functioning as protective screens or huts fashioned from vines or branches for attackers and defenders alike, were standard devices in Byzantine siege warfare during the tenth and eleventh centuries. At the same time, however, it is interesting to note that defenders did have countermeasures against besiegers employing *laisai* as shelters. The *De obsidione* gives these instructions:⁵¹

Ἀθροῖζιν δὲ καὶ προαποτίθεσθαι ἐν τοῖς προμαχώσι λίθους μέλανας, καὶ μικροὺς καὶ βαρεῖς, καὶ δοκοὺς καὶ στημονάρια παχέα καὶ πολλὰ δρυῖνα κατὰ τὰς ἄκρας ὀξέα, ἵν' ὁπόταν καταρριφθῇναι δεήσειεν, φόνον ἐργάζωνται πλεῖστον, διαρρηγνύσωσιν δὲ οὐ μόνον τὰς ἀσπίδας, ἀλλὰ καὶ τὰς λαίσας.

Gather and set out beforehand blackened stones along the battlements, both small and heavy, as well as poles and many thick beams of oak sharpened at the

⁴⁸ *De obsid.*, p. 50.5–7: ἀθροῖζιν δὲ καὶ κληματίδας καὶ βέργας ἰτεῖνας ἢ μυρρίνας πρὸς ποιήσιν λαίσων τῶν ὀφειλουσῶν σκέπειν τοὺς ἐν ταῖς μηχαναῖς ἐφεστῶτας. A passage in the *De re militari* (27.7:πετροβόλοι λέσαι τε) likewise refers to woven screens set around catapults and other siege weapons to protect the operators.

⁴⁹ Ed. A. Dain, “Mémoire inédit sur la défense des places,” *REG* 53 (1940), 124–27. Construction and use of *laisai* as a defense against enemy projectiles are recommended in the sixth precept in the list of instructions, although Dain seems to have identified the term with the classical λαισηῖον: καὶ λαίσας ἐπινοεῖν ὥστε κωλύειν τὰ ἐκ τῶν πολεμίων βέλη, rendered “en ayant pris la précaution de tendre des peaux pour arrêter les traits de l'adversaire.”

⁵⁰ Ed. G. G. Litavrin, *Sovety i rasskazy Kekavmena* (Moscow, 1972), p. 178.15, with comments on p. 442 (note 468). He translates λέσαι by *kanaty*, “cables” or “ropes” suspended from the walls as a cushion against enemy battering rams, but Kekaumenos was probably referring to plaited screens similar to those mentioned in the *De obsidione*.

⁵¹ *De obsid.*, pp. 56.17–57.3; to explain the curious term λίθους μέλανας, van den Berg refers the reader to a passage in Josephus' *Jewish War* (5.6.3) which describes how the Romans blackened (μελάνειν) the stones fired by their catapults to make it harder for the enemy to see and avoid them.

tips, so that, whenever it is necessary to cast them down, they will cause great slaughter and break apart not only shields but also the *laisai*.

An episode portraying the contest between attackers using *laisai* as cover for their assault on the walls and defenders attempting to destroy them with stones and sharpened beams is recorded by the chronicler Skylitzes. About the year 1050 a Turkish force laid siege to Manzikert and kept the town under constant attack for thirty days, using “various types of siege machines and all kinds of devices,” only to be held off by the well-stocked garrison under the capable leadership of the *patrikios* Basil Apokapes. Despairing of success, the Turkish sultan was on the verge of abandoning the siege and going home when the commander of the Chorasmian contingent, a man named Alkan, intervened:⁵²

... he requested that [the sultan] remain one day more and entrust the attack on the city to him. Pleased at the request, he delayed the return home. And so early in the morning Alkan gathered his entire host with him, and stationed the sultan as a spectator on a hill by the eastern gate along with the most distinguished of the Turks. Taking the siege machines, he headed off toward the aforementioned gate, for at that point the city walls appeared to be lower and weaker, while the ground had a rise that was advantageous in a siege, since it allowed those inside the wall to be bombarded from above by those outside. Dividing his force into two parts, he placed one on the hill and bade them maintain a steady barrage of arrows, while he himself took tents woven together from withes, covered on top with cowhides and with wheels beneath the bases of the supporting posts (they call such devices *lesai*), and filled them with men carrying pitchforks, shovels, and other agricultural tools. He intended to push the tents forward little by little and join them to the walls, and thus calmly and confidently go about undermining the foundations, believing as he did that no one would be able to raise his head above the wall because of the mass of projectiles. He imagined that in this way the city would be taken. As he beheld these activities from the wall, Apokapes gave orders for the soldiers on the walls to remain still and for no one to poke his head up, only to have fist-sized rocks at the ready as well as bows and other missile-shooting weapons, to await the signal from him (this was “Christ, give thy aid”), and to get to work once it had been given. He also had with him huge beams, sharpened at one end. This was how he made his preparations; Alkan, on the other hand, pushed ahead a little at a time and set the *lesai* against the wall while the Turks on the outside launched forth a hail of arrows that seemingly eliminated the men inside the wall. When the tents were already close by and

⁵² Skylitzes, pp. 462.64–464.8. This episode is unfortunately not depicted in the Madrid Skylitzes.

their withdrawal appeared impossible, suddenly, on Apokapes' signal, the men deployed by the beams hurled the beams down upon the tents while the rest let fly with bows and stones. Thereupon the tent holding Alkan, pierced through the roof by many beams, was knocked over by their weight and completely overturned. When it was overturned, those inside became exposed and were bombarded from everywhere by stones and archery, with no one able to ward them off. All the others fell dead on the spot, and Alkan, conspicuous because of the brightness of his armor, was taken prisoner. Two virtuous youths sprang forward from the city gates, and seizing him by the hair, dragged him inside the citadel. Basil immediately cut off his head and displayed it on a spear to the Turks, whereupon the sultan, stricken with anguish, broke the siege and went home. . . .

In many details this episode closely corresponds to the directions issued in the treatises concerning the use of the *laisai* and the methods for stopping them. The ill-fated Alkan proceeded to employ wheeled *laisai* to approach and undermine the walls in a manner consistent with that prescribed by Ouranos, while Apokapes and his men gathered stones and heavy, sharpened beams to smash them once they had been pushed up to the walls. Here it is worth recalling that in his treatise Ouranos advised fixing the *laisai* 10–20 m from the wall and then sending sappers out to undermine the foundations. In light of the foregoing passage, this seems to have been a precaution intended to keep the *laisai* out of range of stones and beams hurled down from the parapet, for it was the Chorasmians' advancing their *laisai* to the base of the wall in the belief that the defenders were pinned down that enabled Apokapes' men to bombard them so devastatingly. Ouranos appears to have taken this possible ploy by the defenders into account when setting down his instructions for using the *laisai* in sieges, a sign that from his experience he was familiar with the antidote which the defenders of a fortress were likely to employ against these shelters.

Beyond confirming and elucidating the precepts on siege warfare in the treatises, however, Skylitzes' narrative is interesting testimony to the constant emulation and refinement of enemy weapons and tactics so characteristic of the Byzantines and their foes. In this case plaited *laisai*, first used by the Bulgarians as barricades against the Byzantines, were subsequently adopted by the Byzantines for use as protective screens and huts by attackers and defenders alike in sieges, and as such ended up being used against the Byzantines them-

selves by Chorasmian allies of the Turks who had surely seen these devices in campaigns against the Byzantines along the eastern frontiers.

The primary aim of this paper has been to establish chapters 56–65 of the *Taktika* of Nikephoros Ouranos as an important source for Byzantine warfare in the east, written by a commander active in that region during the first decade of the eleventh century. Since the discussion has centered on the issue of the conflict between tradition and reality in the tactical treatises, it would be apt to conclude by citing Ouranos' remarks on the utility of the methods he recommends, as opposed to those outlined in the classical treatises on siege operations (*Taktika* 65.22, 25):

The men of old, in their pursuit of siege warfare, constructed many devices such as battering rams, wooden towers, scaling ladders with various features, tortoises, and all kinds of other things which our generation can hardly imagine. It has, however, tried all these devices and found that out of all of them, the most effective way, one the enemy cannot match, is undermining the foundations, all the more so if one does this with careful scrutiny and method, and has the accompanying and extremely helpful protection of the *laisai*. . . . Many and varied are the means which the men of old contrived for conducting siege warfare, but I have set down only the methods that our generation currently employs. The more extraordinary devices of the ancients I have passed over, and let those eager to learn them study the *taktika* and find out all about them.

Ouranos' words echo comments in a similar vein made by the authors of the *De velitatione* and *De re militari*, who restrict their own discussions of siege operations to the practicable methods currently in use and likewise refer the interested reader to the more recondite ancient treatises on siege equipment and tactics.⁵³ These remarks do not mean that Ouranos and his fellow soldier-authors considered the ancient treatises valueless—indeed, these texts were evidently read as potentially useful sources of information and ideas well worth knowing as part of a good soldier's background—but instead that when they came to the discussion of siege operations, or other types of warfare in their own day, these Byzantine tacticians chose to instruct the reader not by what they had read, but by what they had used or seen themselves.

⁵³ Cf. *De velitatione* 21.12–17 (ed. Dennis in *Three Byzantine Military Treatises*, 137–239) and *De re militari*, 27.3–13.

APPENDIX

The seal proclaiming Nikephoros Ouranos “master of the East” is one of two unpublished seals bearing his name in the Dumbarton Oaks collection. Both are edited here; the illustrations are enlarged at a scale of 1.5 to 1.

(1) Fogg 1576—Diameter: 28 mm. Weight: 9.70 g. Cracked along the channel (obverse) and corroded along the circumference. Effaced on the top line and along the left side of the reverse.

Obverse: Bust of the Virgin, flanked by the inscription: ΜΡ-.. : Μ(ήτη)ρ [Θ(εο)ύ]. The remains of a circular inscription, beginning at seven o'clock, are visible in the lower left and upper right quarters: +ΘΚΕΡ.....ΤΩ..... Border of dots.

Reverse: An inscription of six lines and a decoration below. Border of dots.

.....|..Ρ.ΜΑΓΙC|..Ρ.ΤΩΚΡΑ|..ΝΤΙΤΗC|..ΑΤΟΛΗC|
 .ΩΘ̄Ν̄Ω|—✠—

Θ(εοτό)κε β[οήθει] τῷ [σῷ] δούλῳ Νικηφόρ(ω)
 μαγ[ιστ]ρ(ω) τῷ κρα[τοῦ]ντι τῆς [Ἀν]ατολῆς [τ]ῷ
 Οὐ(ρα)νῷ



It is worth noting that family names on seals were normally shortened by dropping the termination, whereas in this case the engraver has abbreviated the name Ouranos by using the scribal contraction οὔνος (for οὐρανός, or “heaven”) and adding the termination in the dative case.

(2) Fogg 1509—Diameter: 31 mm.; field: 25 mm.
Weight: 13.60 g.

Corroded on the obverse and cracked in the upper left quarter on the reverse.

Obverse: Bust of the Virgin orans, the medallion of Christ before her. On either side the inscription: $\overline{\text{MP}}-\overline{\text{ΘV}}$: $\text{M}(\eta\tau\eta)\rho\ \Theta(\epsilon\omicron)\upsilon$. Border of dots.

Reverse: An inscription of six lines. Border of dots.

$+\overline{\text{ΘK}}\overline{\text{E}}\overline{\text{P}}\overline{\text{O}}|\text{H}\overline{\text{Θ}}\overline{\text{E}}\overline{\text{I}}\overline{\text{T}}\overline{\text{U}}|\text{C}\overline{\text{U}}\overline{\text{Δ}}\overline{\text{O}}\overline{\text{N}}\overline{\text{Λ}}\overline{\text{U}}|\text{N}|\text{K}\overline{\text{H}}\overline{\text{P}}\overline{\text{O}}\overline{\text{P}}|$
 $\text{T}\overline{\text{U}}\overline{\text{O}}\overline{\text{N}}\overline{\text{P}}\overline{\text{A}}|\text{N}\overline{\text{U}}-$

$\Theta(\epsilon\omicron\tau\acute{o})\kappa\epsilon\ \beta\omicron\eta\theta\epsilon\iota\ \tau\overline{\omega}\ \sigma\overline{\omega}\ \delta\omicron\upsilon\lambda\omega\ \text{N}\iota\kappa\eta\phi\acute{o}\rho(\omega)\ \tau\overline{\omega}\$
 $\text{O}\overline{\upsilon}\overline{\rho}\overline{\alpha}\overline{\nu}\overline{\omega}$



The absence of a title rules out certain identification, but it is very probable that this is a personal seal issued by our Nikephoros Ouranos sometime in the last decade of the tenth century or the first decade of the eleventh. Such a dating is secure on grounds of epigraphy, supported by the close resemblance in lettering between this specimen and a seal of Patriarch Sergios II struck between 1001 and 1019 (N. Oikonomides, *A Collection of Dated Byzantine Lead Seals* [Washington, D.C., 1986], no. 74). This dating is also consistent with Ouranos' estimated lifetime (ca. 950–1010), making it unlikely that an ancestor or descendant of the same

name (who would have to be a grandfather or grandson, in keeping with the Byzantine custom) could have issued the seal. It is possible that the seal could be that of a contemporary Nikephoros Ouranos who belonged to a collateral branch of the family, but the rare mentions of the name Ouranos in seals and documents of the tenth and eleventh centuries do not suggest that such a branch existed.

Université de Montréal
and Dumbarton Oaks